

Work Order ID 70899

Friday, June 17, 2011 7:35:05 AM

Page 1

Item ID: D350-689-023

Accept

Setup Start

Revision ID:

Stop

Item Name: Energy Attenuating Floor Provisions

Start Date: 6/16/2011 Start Qty: 1.00

Cust Item ID:

Required Date: 6/23/2011 Req'd Qty: 1.00

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

DSI D9419

Rev A

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile and create labels per PPP D350-689-023 CHG002

8/10/16

N/A

110

0.00



Pick Kit

Packaging

Memo

0.00

Packaging

11/6/20

120

0.00



QC4- 100% Inspect kits for completeness

QC

Memo

0.00

Quality Control

8/10/16

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
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| | | | | | | | | |

NOTE: Date & initial all entries

Work Order ID 70899

Friday, June 17, 2011 7:35:06 AM



Page 2

Item ID: D350-689-023

Accept



Setup Start



Revision ID:

Stop



Item Name: Energy Attenuating Floor Provisions

Start Date: 6/16/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 6/23/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 130 | Packaging | 0.00 | | | | | | | |
| Packaging | Memo | 0.00 | | | | | | | |
| Packaging | Identify and pack for shipping as per PPP D350-689-023 Location: <u>10</u> PPP Rev: <u>A</u> | | | | | | | | |
| 140 | QC21- Final Inspection - Work Order Release | 0.00 | | | | | | | |
| QC Quality Control | Memo | 0.00 | | | | | | | |

QDP 70899

11/8/16

11/8/17

CMF

11-08-16

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Picklist Print

Friday, June 17, 2011 7:35:13 AM

Page 1

Work Order ID: 70899

Parent Item: D350-689-023

Parent Item Name: Energy Attenuating Floor Provisions



Start Date: 6/16/2011

Required Date: 6/23/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A 08-12-23 new issue DD verified by:EC
route seq DD 10.02.12 vrified byJLM

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|-----------------|-------------|--------------|---------------|----------------|--------|
| S AN960JD10 Washer | NAS1149D0363J | Purchased | No | | | 110 | Each | 0.0000 | 9 | 9 | | | |
| D3025-1 Beam | | Manufactured | No | | | 110 | Each | 3.0000 | 1 | | | | |
| | | | | <u>Location</u> | | <u>Loc Qty</u> | | <u>Loc Code</u> | | | | | |
| | | | | ST177 | | 3 | | | | | | | |
| | | | | 69612 | | 3 | | | | | | | |
| S D3026-1 Channel | | Manufactured | No | | | 110 | Each | 10.0000 | 1 | 1 | | | |
| | | | | <u>Location</u> | | <u>Loc Qty</u> | | <u>Loc Code</u> | | | | | |
| | | | | ST177 | | 10 | | | | | | | |
| | | | | 70399 | | 10 | | | | | | | |
| S D3027-1 Clip | | Manufactured | No | | | 110 | Each | 17.0000 | 1 | | | | |
| | | | | <u>Location</u> | | <u>Loc Qty</u> | | <u>Loc Code</u> | | | | | |
| | | | | ST031 | | 17 | | | | | | | |
| | | | | 22566 | | 17 | | | | | | | |
| S D3027-3 Clip | | Manufactured | No | | | 110 | Each | 9.0000 | 1 | 1 | | | |
| | | | | <u>Location</u> | | <u>Loc Qty</u> | | <u>Loc Code</u> | | | | | |
| | | | | ST031 | | 9 | | | | | | | |
| | | | | 22566 | | 9 | | | | | | | |

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Picklist Print

Friday, June 17, 2011 7:35:13 AM

Page 2

Work Order ID: 70899

Parent Item: D350-689-023






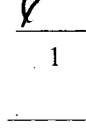



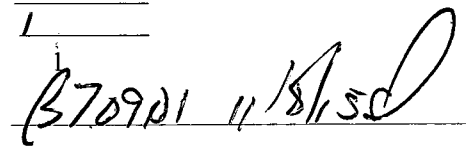
Parent Item Name: Energy Attenuating Floor Provisions

Start Date: 6/16/2011

Required Date: 6/23/2011

Start Qty: 1.00

Required Qty: 1.00

| | | | | | | | | | |
|---|---------------------|--------------|----|-----------------|----------------|------|-----------------|---|---|
| 8 | D3027-5 | Manufactured | No | | 110 | Each | 13.0000 |  |  |
| | Clip | | | | | | | | |
| | | | | <u>Location</u> | <u>Loc Qty</u> | | <u>Loc Code</u> | | |
| | | | | ST031 | 13 | | | | |
| | | | | 22566 | 13 | | | | |
| 5 | D3027-7 | Manufactured | No | | 110 | Each | 17.0000 |  |  |
| | Clip | | | | | | | | |
| | | | | <u>Location</u> | <u>Loc Qty</u> | | <u>Loc Code</u> | | |
| | | | | ST031 | 17 | | | | |
| | | | | 70497 | 17 | | | | |
| 5 | D3234-1 | Manufactured | No | | 110 | Each | 0.0000 |  |  |
| | Doubler | | | | | | | | |
| | | | | <u>Location</u> | <u>Loc Qty</u> | | <u>Loc Code</u> | | |
| | | | | ST031 | 1 | | | | |
| | | | | 70497 | 1 | | | | |
| 5 | D3234-3 | Manufactured | No | | 110 | Each | 1.0000 |  |  |
| | Doubler | | | | | | | | |
| | | | | <u>Location</u> | <u>Loc Qty</u> | | <u>Loc Code</u> | | |
| | | | | ST233 | 1 | | | | |
| | | | | 44166 | 1 | | | | |
| 8 | D3811-041 | Manufactured | No | | 110 | Each | 0.0000 |  |  |
| | Seat Track Assembly | | | | | | | | |

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

Friday, June 17, 2011 7:35:14 AM

Page 3

Work Order ID: 70899

Parent Item: D350-689-023

Parent Item Name: Energy Attenuating Floor Provisions

Start Date: 6/16/2011

Required Date: 6/23/2011

Start Qty: 1.00

Required Qty: 1.00

MS20426AD4-5

Purchased

No

110

Each

5,596.000

14

14



Rivet

Location

Loc Qty

Loc Code

MEZZ

307

6733

307

ST317

5289

6874

5289

14

MS20470AD4-5

Purchased

No

110

Each

824.0000

34

34



Rivet, Universal Head

Location

Loc Qty

Loc Code

ST319

824

116893

824

34

MS20470AD4-6

Purchased

No

110

Each

3,519.000

18

18



Rivet, Universal Head

Location

Loc Qty

Loc Code

ST319

3519

117395

2004

117887

1515

18

MS20470AD5-6

Purchased

No

110

Each

1,372.000

32

32



Rivet

Location

Loc Qty

Loc Code

ST320

1372

105433

1372

32

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Shop Packet Print

Page 3

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

Friday, June 17, 2011 7:35:14 AM

Page 4

Work Order ID: 70899

Parent Item: D350-689-023

Parent Item Name: Energy Attenuating Floor Provisions

Start Date: 6/16/2011

Required Date: 6/23/2011

Start Qty: 1.00

Required Qty: 1.00

MS21042L3

Purchased

No

110

Each

2,139.000

9

9



Nut

Location

Loc Qty

Loc Code

ST300

2139

116391

9

116549

430

117441

800

117601

400

117885

500

MS24694-S50

Purchased

No

110

Each

76.0000

9

9



Screw

Location

Loc Qty

Loc Code

ST289

50

117739

50

ST298

26

116900

26

Friday, June 17, 2011 7:35:14 AM

Shop Packet Print

Page 4

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D350-689 REV. A
AND FLIGHT MANUAL SUPPLEMENT FMS-D350-689 REV. A
AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-689 REV. 0
REF. CANADIAN STC: SH02-33
REF. FAA STC: SR01620NY

PURPOSE

The purpose of this DSI is to add the D350-689-021 Dual High Back Seat Installation, LH, the D350-689-023 Floor Provisions Kit and the D350-689-043 Dual High Back Seat Assembly to IIN-D350-689 Rev. A. The D350-689-021/-023 Kits are compatible with the Energy Attenuating Seat rails in later AS 350/355 model aircraft.

The DSI 9419-011 Kit includes the parts that are required to convert a D350-689-011 installation into a D350-689-021 installation.

PART LIST




| -011 | -021 | -023 | -043 | P/N | DESCRIPTION |
|------|------|------|------|--------------|---|
| X | | | | DSI 9419-011 | ENERGY ATTENUATING CONVERSION KIT |
| | X | | | D350-689-021 | DUAL HIGH BACK SEAT INSTALLATION, LH |
| | 1 | X | | D350-689-023 | ENERGY ATTENUATING FLOOR PROVISIONS KIT |
| | 1 | | X | D350-689-043 | DUAL HIGH BACK SEAT ASSEMBLY |
| | | | 2 | D3016-041 | SEAT FRAME ASSEMBLY |
| | | | 1 | D3017-041 | BACK FRAME ASSEMBLY |
| | 1 | | | D3018-1 | SEAT CUSHION |
| | 1 | | | D3019-1 | BACK CUSHION |
| | | | 1 | D3021-041 | TUBE ASSEMBLY |
| | | | 1 | D3022-1 | SEAT PAN |
| | | | 1 | D3023-1 | BACK PANEL |
| | | | 3 | D3024-1 | SPACER |
| | | 1 | | D3025-1 | BEAM |
| | | 1 | | D3026-1 | CHANNEL |
| | | 1 | | D3027-1 | CLIP |
| | | 1 | | D3027-3 | CLIP |
| | | 1 | | D3027-5 | CLIP |
| | | 4 | | D3027-7 | CLIP |
| | | | 2 | D3031-1 | LOOP |
| 1 | | 1 | | D3234-1 | DOUBLER |
| 1 | | 1 | | D3234-3 | DOUBLER |
| 2 | | | 2 | D3808-041 | SEAT RAIL ASSEMBLY |
| 4 | | | 4 | D3809-1 | SLIDING BLOCK |
| 1 | | 1 | | D3811-041 | SEAT TRACK ASSEMBLY |

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: Aug. 19/2008
CERT. NO.: SH02-33
ISSUE NO.: 1

| | | | |
|------------|---|--|----------|
| A | NEW ISSUE | RF | 08.08.19 |
| REV. | DESCRIPTION | BY | DATE |
| DESIGN | RF | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. REV. A DSI 9419 SHEET 1 OF 5 TITLE SCALE ENERGY ATTENUATING PROVISION KIT NTS | |
| DRAWN | RF | | |
| CHECKED |  | | |
| MFG. APPR. | N/A | | |
| APPROVED |  | | |
| DE APPR. |  | | |
| DATE | 08.08.19 | COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD. | |

REFERENCE

| -011 | -021 | -023 | -043 | P/N | DESCRIPTION |
|------|------|------|------|---------------|------------------------|
| | | | 3 | AN3-12A | BOLT |
| 14 | | 14 | | MS20426AD4-5 | RIVET |
| 34 | | 34 | | MS20470AD4-5 | RIVET |
| 18 | | 18 | | MS20470AD4-6 | RIVET |
| | | 32 | | MS20470AD5-6 | RIVET |
| | | | 40 | MS20600AD4W2 | RIVET |
| | | | 6 | MS20600AD4W3 | RIVET |
| 9 | | 9 | 23 | MS21042L3 | NUT (or MS21042-3) |
| | | | 4 | MS24693-S272 | SCREW |
| 8 | | | 8 | MS24694-S3 | SCREW |
| 9 | | 9 | | MS24694-S50 | SCREW |
| 4 | | | 4 | MS24694-S148 | SCREW |
| | | | 4 | MS27039-1-17 | SCREW |
| | | | 12 | MS27039-1-19 | SCREW |
| | | | 23 | NAS1149D0332J | WASHER (or AN960JD10L) |
| 9 | | 9 | | NAS1149D0363J | WASHER (or AN960JD10) |

PROCEDURE

1. Install the under floor structure as outlined in steps 1-18 of IIN-D350-689 Rev. A and DSI 9311 Rev. A as applicable, except do not install D3032-1 Spacers. Attach D3026-1 Channel to floor using (14) MS20426AD4 rivets. Ensure D3234-1/-3 Doublers are installed per DSI 9269 Rev. A.
2. Position the D3811-041 Seat Track Assy at LBL 27.33 as shown in Figure 1 to be in-line with the existing seat rails at LBL 8.98 and LBL 19.16.
3. Transfer the attachment holes from D3811-041 Seat Track Assy to aircraft floor (9 pls) using a $\phi 0.201$ (#7 drill). Deburr holes. Install D3811-041 using (9) MS24694-S50 screws, (9) NAS1149D0363J washers, and (9) MS21042L3 nuts as shown in Figure 1. Torque screws to 20 to 25 in-lbs (2.3 to 2.8 Nm).
4. If converting a -041 Seat Assembly to a -043 Seat Assembly, remove D3028-1 Studs, D3029-1 Springs, and D3030-1 Locks from the D350-689-041 Seat Assembly. Install (2) D3808-041 Seat Rails Assemblies as shown in Figure 1 Detail A using (4) MS24694-S148 Screws. Torque screws to 100 to 140 in-lbs (11.3 to 15.8 Nm). Install D3809-1 Sliding Blocks using (2) MS24694-S3 screws as shown in Figure 1 Detail A. Torque screws to 12 to 15 in-lbs (1.4 to 1.7 Nm).
5. Remove screws from back end of Seat Tracks at LBL 27.33 and LBL 8.98. Slide D350-689-043 Seat Assembly into both seat tracks and lock in desired position using D3810-1 Retractable Spring Plungers. Re-install screws on back of seat tracks per the Aircraft Maintenance Manual.

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: Aug. 19/2008
CERT. NO.: SH02-33
ISSUE NO.: 1

| | | | |
|----------------------|---------------|--|--------------|
| DESIGN | RF | DART AEROSPACE LTD | |
| DRAWN | RF | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | RF | DRAWING NO. | REV. A |
| MFG. APPR. | N/A | DSI 9419 | SHEET 2 OF 5 |
| APPROVED | RF | TITLE | SCALE |
| DE APPR. | RF | ENERGY ATTENUATING PROVISION KIT | NTS |
| DATE 08.08.19 | | <small>COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> | |